BookletChart™

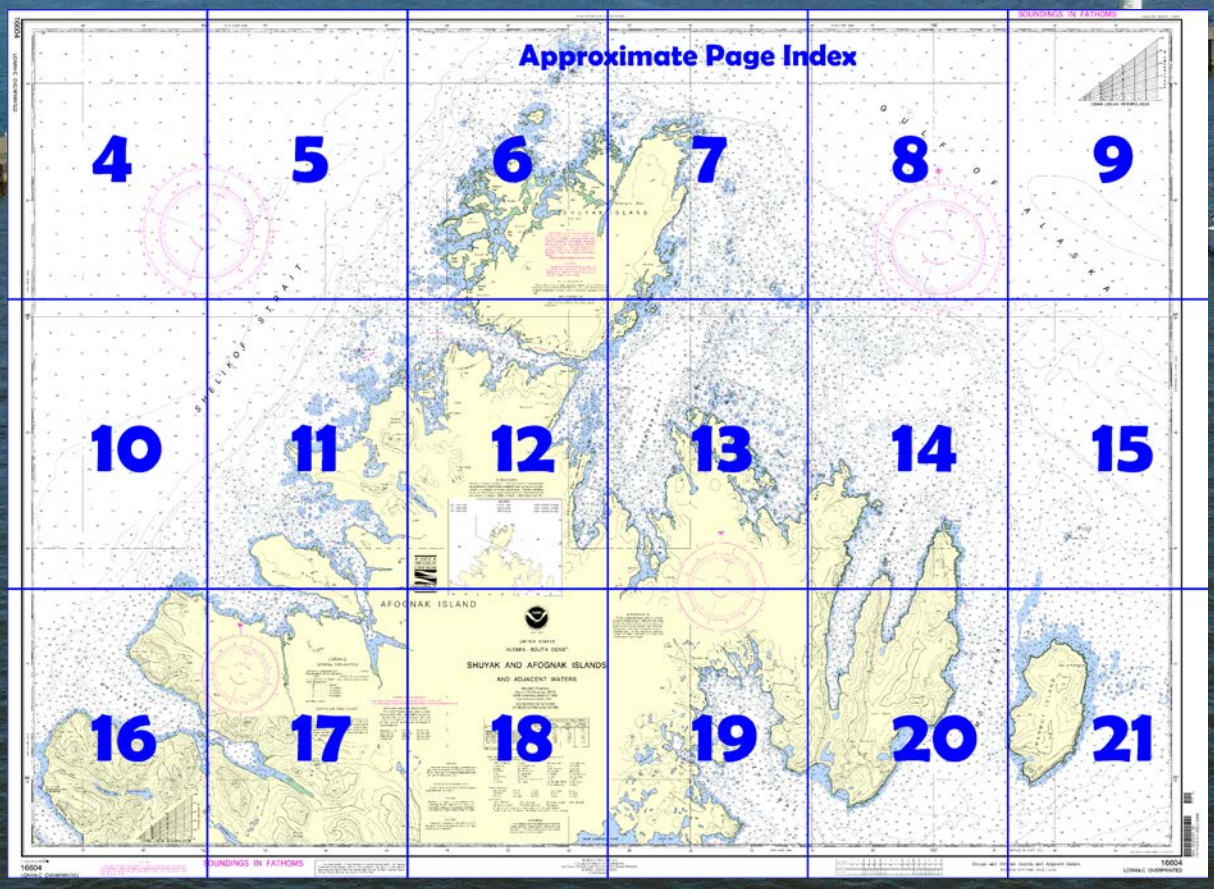
Shuyak and Afognak Islands and Adjacent Waters

NOAA Chart 16604

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.

- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

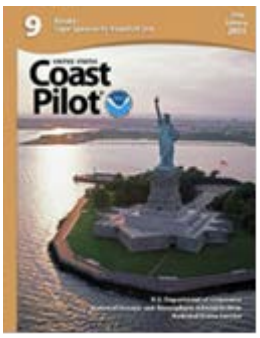
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=16604.



(Selected Excerpts from Coast Pilot)
Pilotage, Kodiak Island.–Pilotage, except for certain exempted vessels, is compulsory for all vessels navigating the waters of the State of Alaska.
The Kodiak Island area is served by the Southwest Alaska Pilots Association. (See **Pilotage, General** (indexed), chapter 3, for the pilot pickup stations and other details.)
Vessels en route to Discoverer Bay can contact the pilot boat by calling "DISCOVERER BAY PILOT BOAT" on VHF-FM channel 16 or on a prearranged frequency between pilot and agent/vessel.
Tonki Bay, on the W side of Tonki Cape, has two arms separated by a headland. A 106-foot rocky islet is 0.5 mile N of the headland. Three rocks awash are about 0.3 mile from the E shore and 2 miles S of Tonki Cape. Anchorage is about 0.3 mile from the head of the E arm in 10 fathoms, soft bottom, but it is not secure with N winds. Small boats may anchor in the small cove on the E side of the head of the E arm in 8 fathoms, muddy bottom, in any weather.
The W arm of Tonki Bay extends 6.5 miles S of the headland separating the two arms. Anchorage may be had in 18 fathoms, muddy bottom, about 0.3 mile from head of the arm.
On the E part of Afognak Island is a series of mountain ridges with low depressions between them running through the island from N to S. From a distance Marmot Island appears as the easternmost of these ridges. The lower parts of Afognak Island are wooded, except its E coast, and its SW end S of Paramanof Bay.
Caution.–In making Tonki Cape or Marmot Strait from the N, a very irregular set to the W has been experienced. In foggy weather a vessel is liable to be too close to the breakers off Sea Otter Island unless precautions are taken. Likewise in running to this locality from Seward, abnormal set has been experienced. From the experience of a survey vessel making these runs and in lying-to offshore, there seems to be two factors for which allowance should be made. First, if the run is made during the time of a flood spring tide, extra allowance should be made for set to the W. Second, if the course of the vessel passes over a bank or even a locality where the water is shoaled, extra allowance for a stronger current should be made.
Tonki Cape, the NE end of Afognak Island, is a narrow grass-covered point 87 feet high near its N extremity. A low-lying gap connects it with the ridge separating Tonki Bay and Marmot Strait. A short reef extends N from the cape 0.3 mile, terminating in a rock awash at high water. It is recommended that vessels clear the N end of the cape by at least 1.5 miles. **Tonki Cape Light** (58°21'09"N., 151°59'12"W.), 75 feet (22.9 m) above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark.
Marmot Island, about 6.5 miles long, parallels the E side of Afognak Island. Marmot Island is wooded to a height of about 500 feet. The N end is low and rises gradually to the highland. The E side and S end of the island are bluffs over 1,000 feet high in places. The W shore is also steep but lower. Three high rocks are close to **Marmot Cape**, the S end of the island, and two more are close to its SE side.
The SE shore of Marmot Island is a Steller sea lion rookery site. There is a 3-mile vessel exclusionary buffer zone around all but the NW shore of the island. (See **50 CFR 223.202,** chapter 2, for limits and regulations.)
Shoal areas adjacent to the NW shore of Marmot Island extend N toward Sealion Rocks and border the N approach to Marmot Strait. A 4-fathom spot in this area is 2 miles off the N end of Marmot Island.
Marmot Strait, between Afognak and Marmot Islands, is 2.5 miles wide at its narrowest part. The strait is apparently free from dangers except along the shores. A shoal of 1¼ fathoms is 650 yards off the W shore of Marmot Strait, 6 miles from Tonki Cape. A midchannel course through the strait is recommended. Tidal currents have an estimated velocity of 1 to 3 knots, the flood setting N through the strait.
The W coast of Marmot Strait for about 5 miles S from Tonki Cape is broken and rocky, with reefs extending offshore. Along this stretch is a low bluff with a grass- and muskeg-covered plain, extending 0.3 mile inland to the main ridge which rises abruptly. S to King Cove the bluffs increase in height with the shores steep-to.

U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies

RCC Juneau	Commander 17th CG District Juneau, Alaska	(907) 463-2000

Table of Selected Chart Notes

CAUTION

Mariners are urged to use caution when navigating in the area of this chart due to possible changes in depths and shoreline as a result of the earthquake of Mar 27, 1964.

HEIGHTS

Elevation of rocks, bridges, landmarks and lights are in feet and refer to Mean High Water. Contour and summit elevation values are in feet and refer to Mean Sea Level.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 8. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 17th Coast Guard District in Juneau, Alaska, or at the Office of the District Engineer, Corps of Engineers in Anchorage, Alaska.

Refer to charted regulation section numbers.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

Mercator Projection
Scale 1:78,000 at Lat. 58°30'
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 2.561" southward and 7.742" westward to agree with this chart.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK	KZZ-90	162.425 MHz
Bede Mt, AK	WNG-528	162.450 MHz
Pillar Mt, AK	WNG-531	162.525 MHz
Kodiak, AK	WXJ-78	162.55 MHz

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

COLREGS, 80.1705 (see note A)

International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

LORAN-C

GENERAL EXPLANATION

LORAN-C FREQUENCY.....100kHz
PULSE REPETITION INTERVAL
7960.....79600 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M.....Master
W.....Secondary
X.....Secondary
Y.....Secondary
Z.....Secondary

EXAMPLE: 7960-X

RATES ON THIS CHART

7960-X 7960-Y

Loran-C correction tables published by the National Imagery and Mapping Agency or others should not be used with this chart. The lines of position shown have been adjusted based on survey data. Every effort has been made to meet the ¼ nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lattices in inshore waters.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Iso isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(21) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

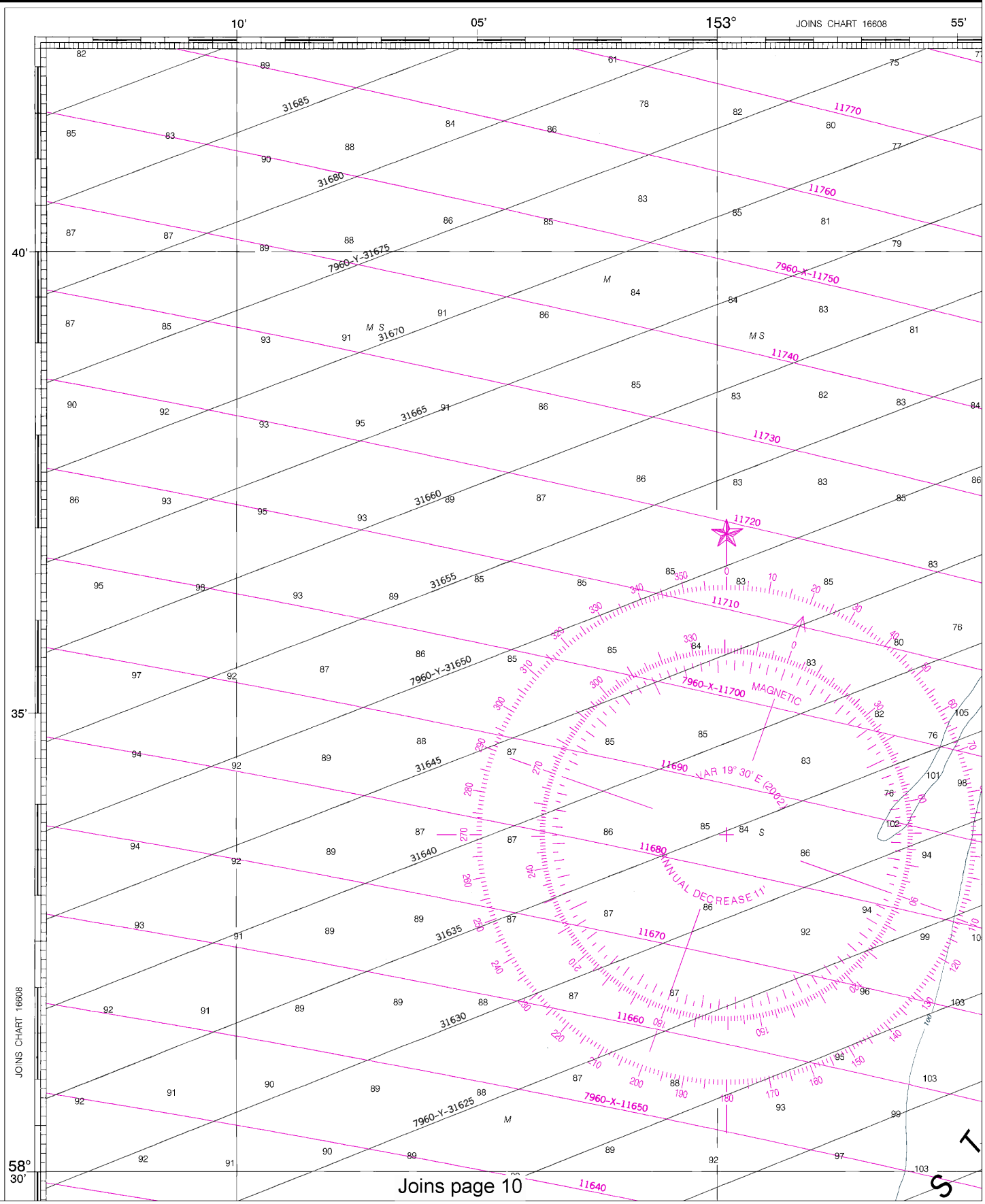
TIDAL INFORMATION

Place Name	(LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
		feet	feet	feet	feet
Malina Bay	(58°11'N/152°57'W)	14.5	13.7	1.7	-4.5
Big Bay, Shuyak I.	(58°33'N/152°37'W)	13.9	13.1	1.6	-4.5
Carry Inlet, Shuyak I.	(58°35'N/152°31'W)	13.1	12.3	1.6	-4.5
Tonki Bay	(58°19'N/152°04'W)	11.2	10.2	1.3	-4.5
Marmot Island	(58°14'N/151°52'W)	9.8	8.8	1.1	-4.0
Izhut Bay	(58°13'N/152°14'W)	8.9	8.0	1.1	-4.5

(590) Latest information available

16604

LORAN-C OVERPRINTED



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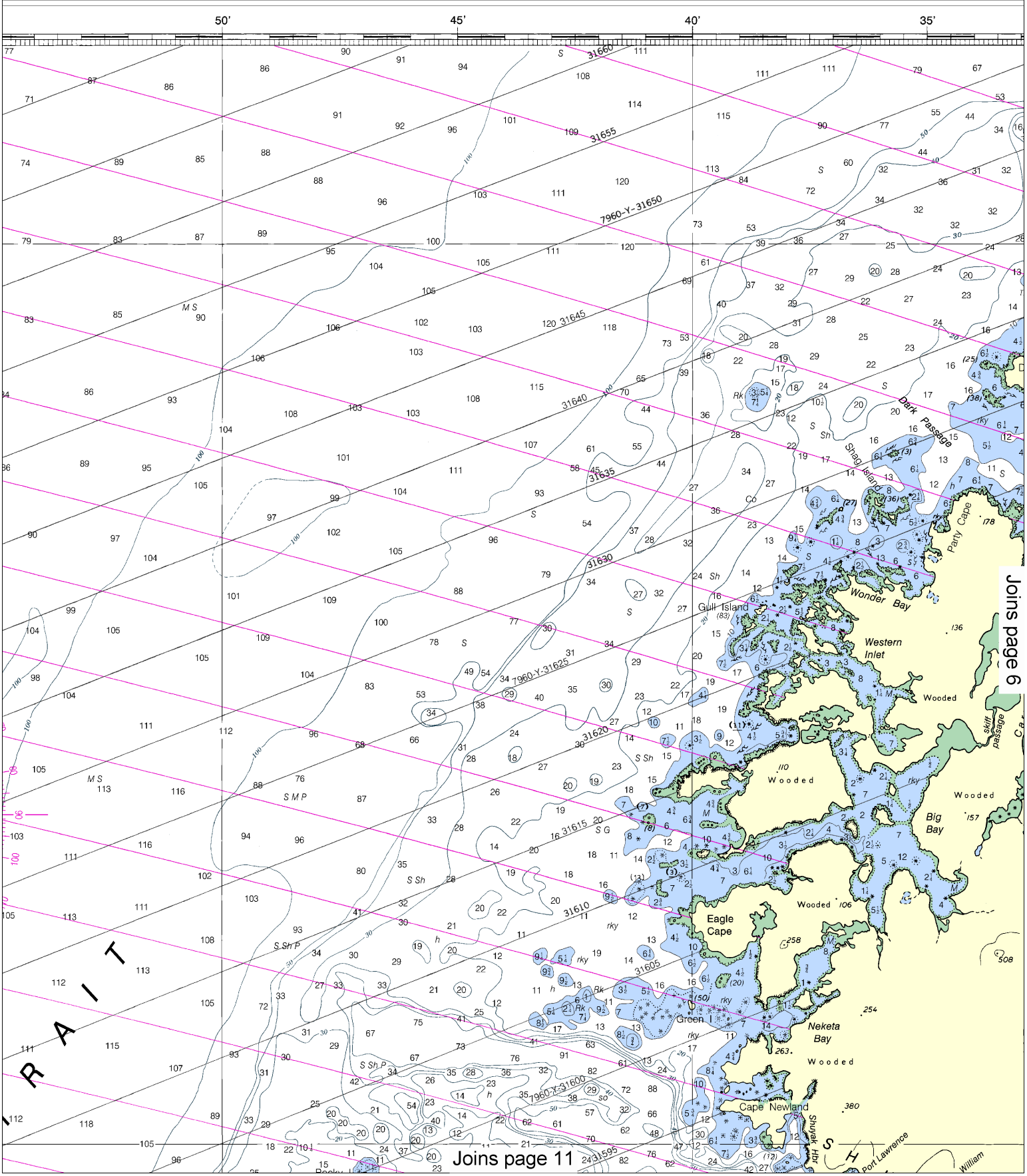
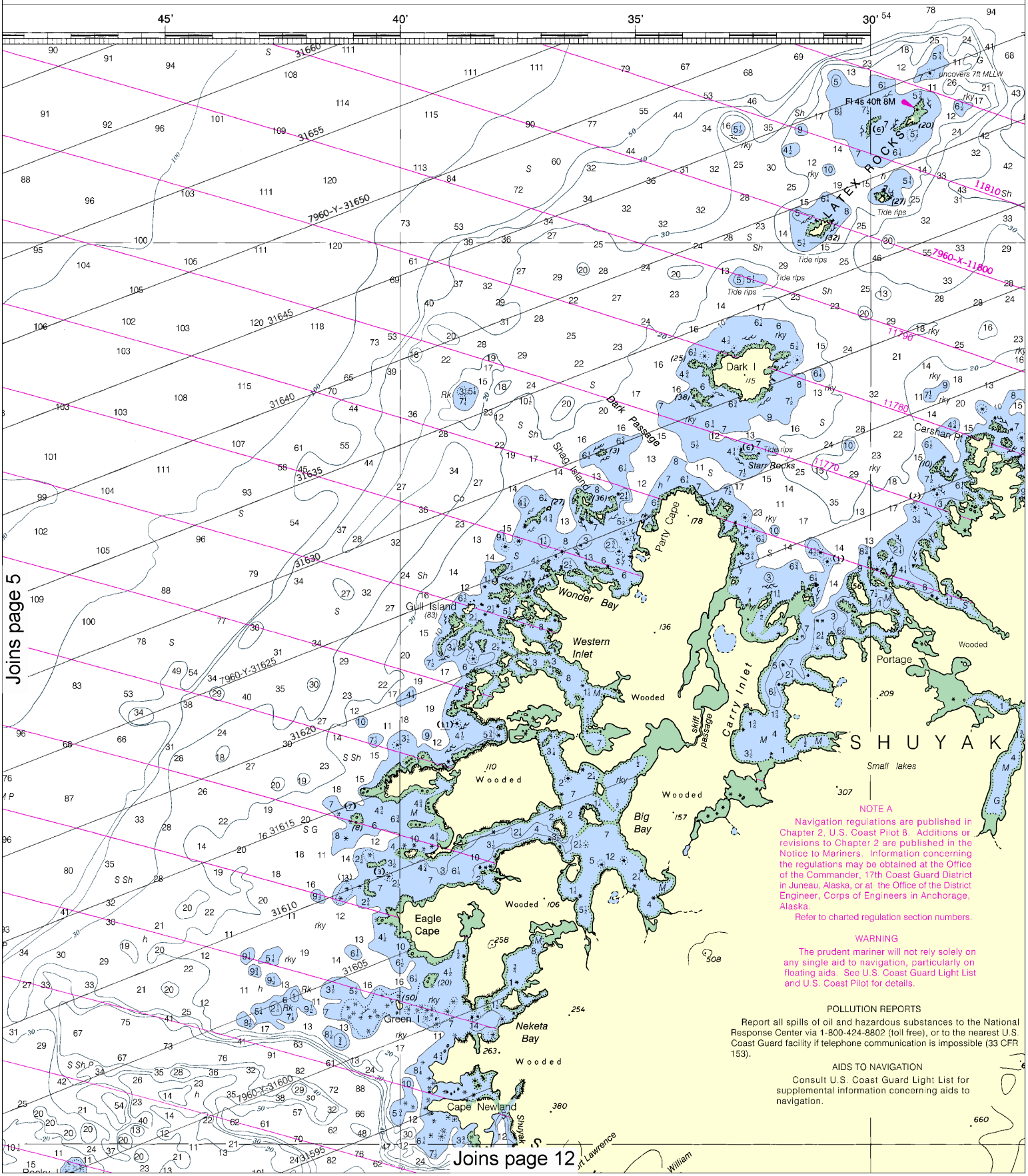
Note: Chart grid lines are aligned with true north.



This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:104000. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.



NOTE A

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WARNING

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AIDS TO NAVIGATION

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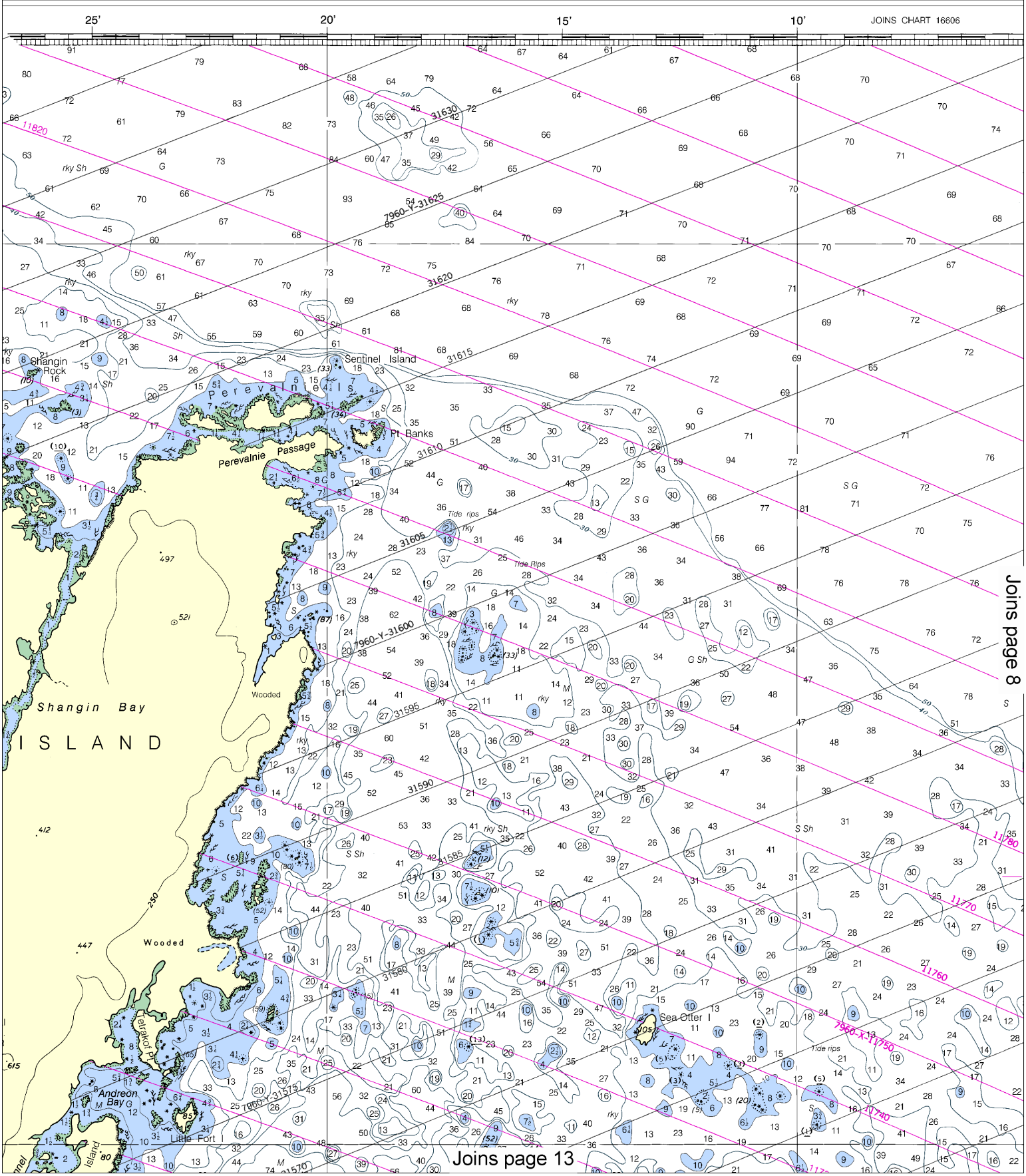
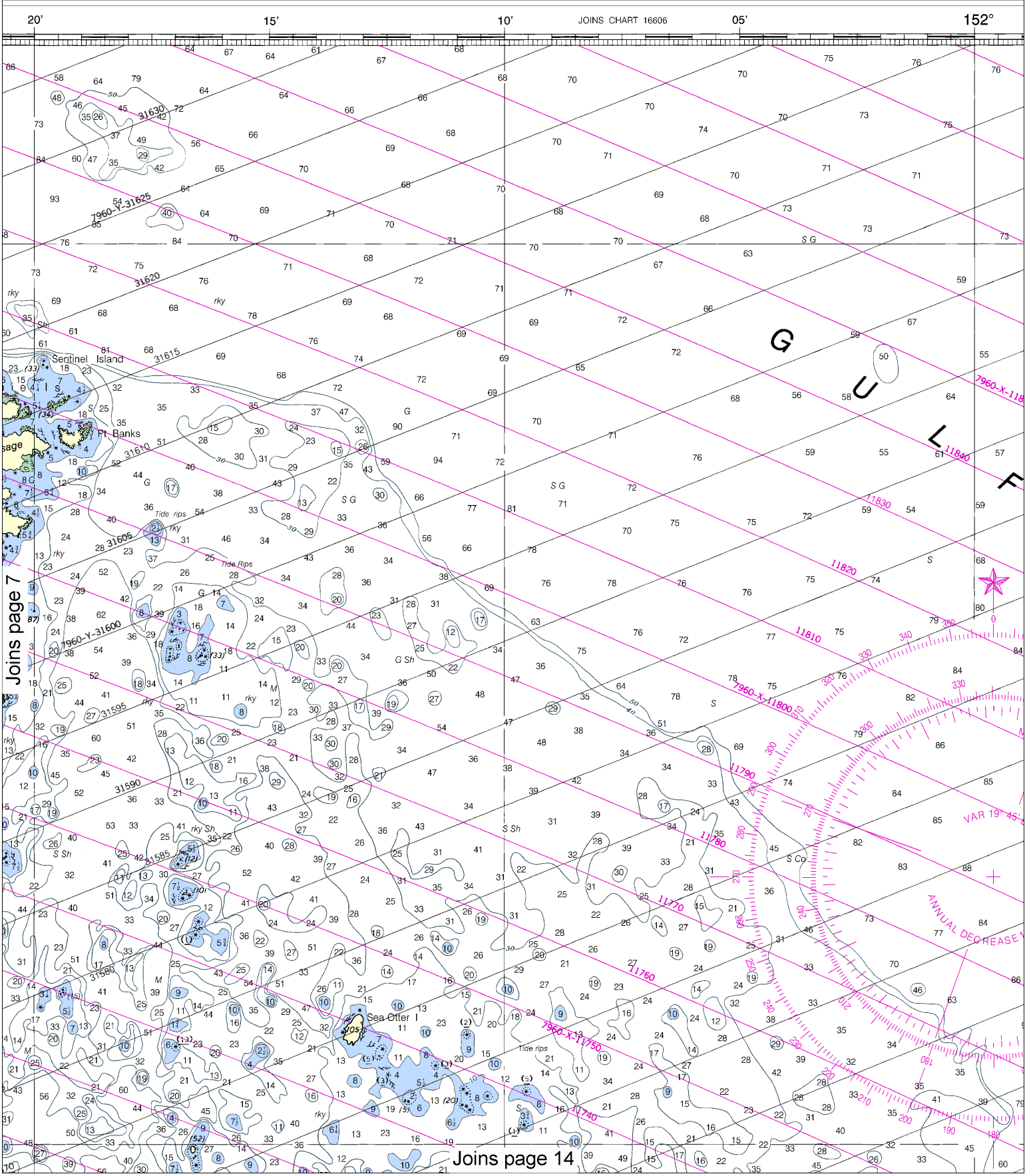
Note: Chart grid lines are aligned with true north.

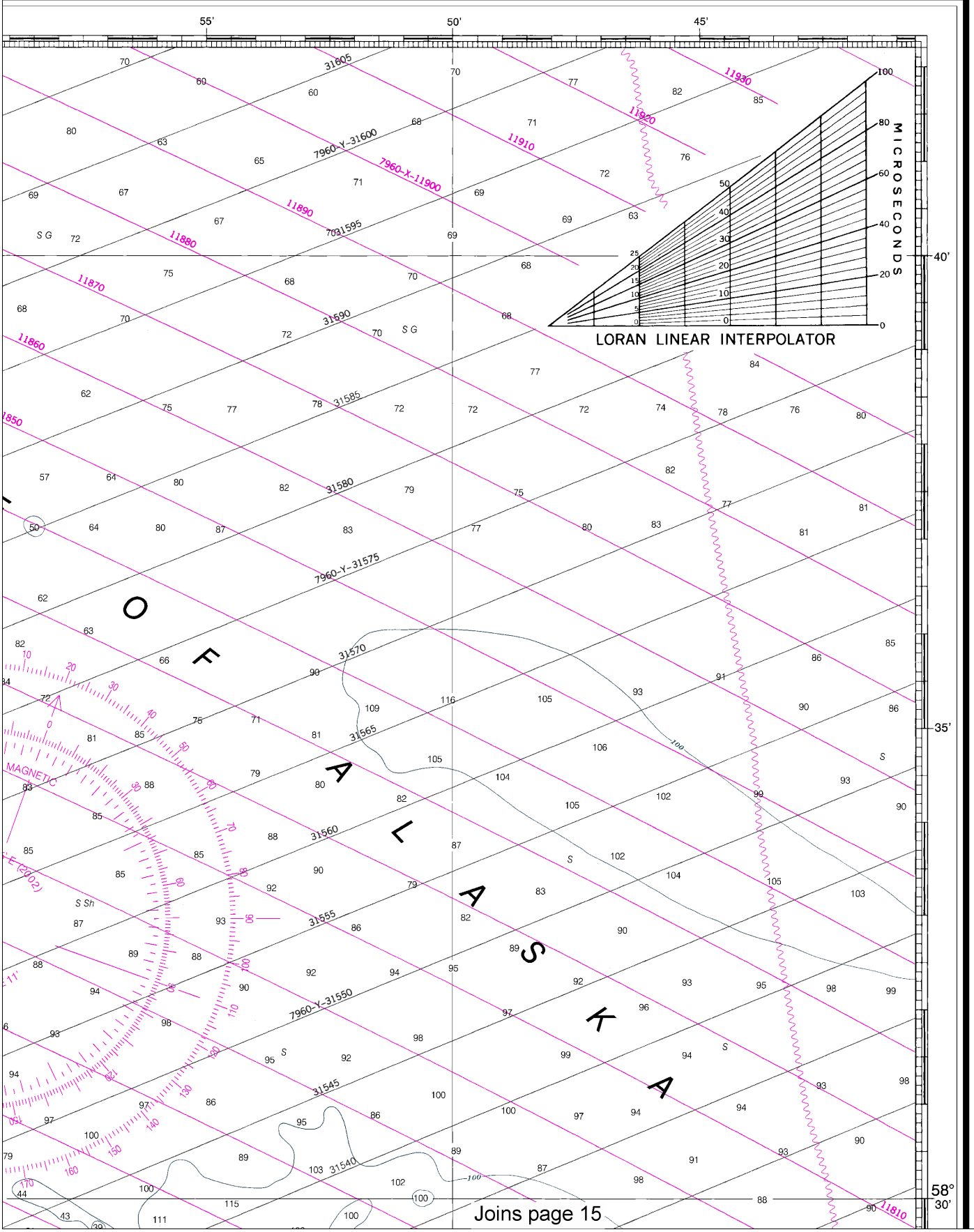


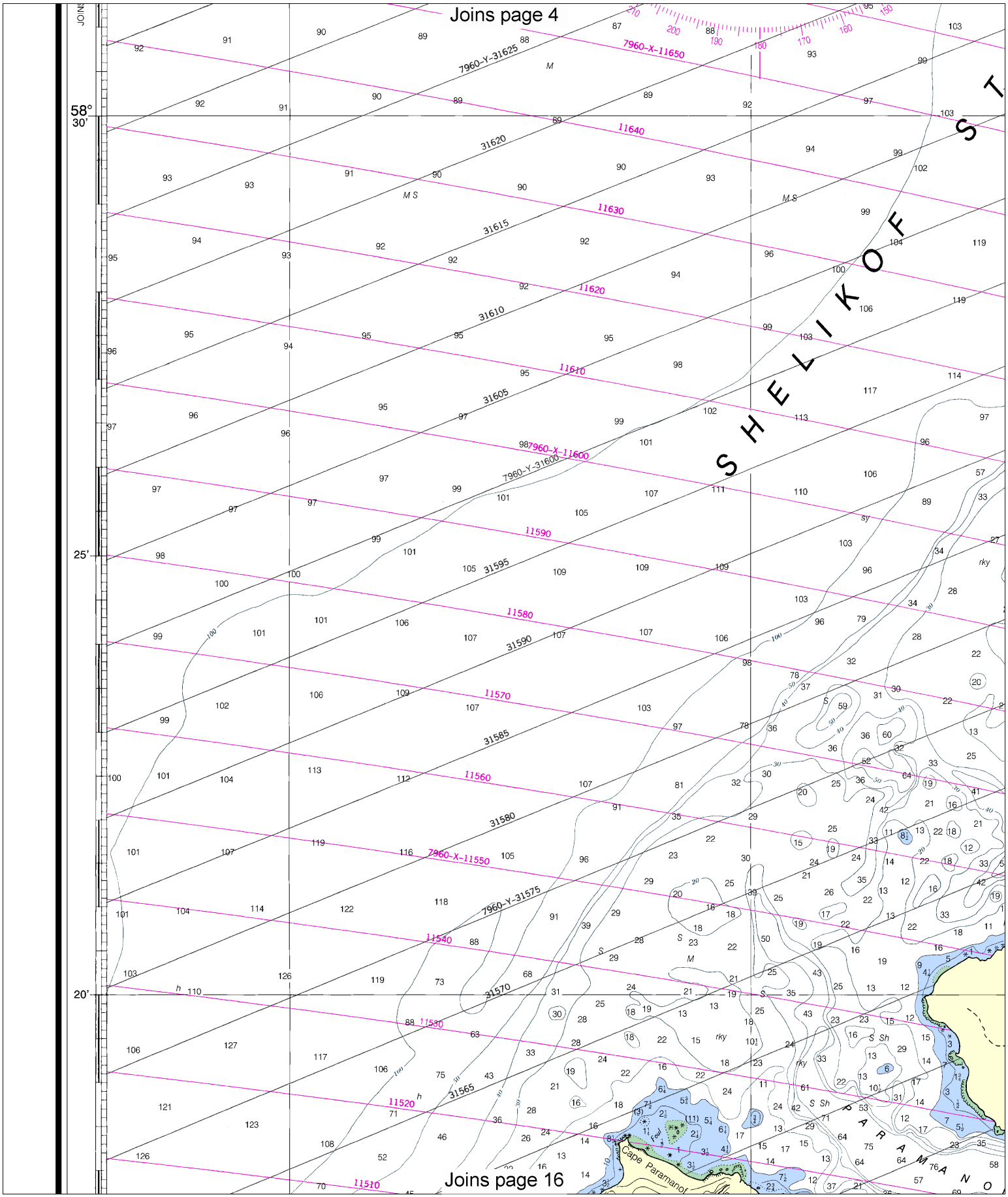
This BookletChart has been updated through: Coast Guard Local Notice To Mariners: 4812 11/27/2012,
NGA Weekly Notice to Mariners: 4812 12/1/2012,
Canadian Coast Guard Notice to Mariners: 0912 9/28/2012.



Note: Chart grid lines are aligned with true north.

SOUNDINGS IN FATHOMS





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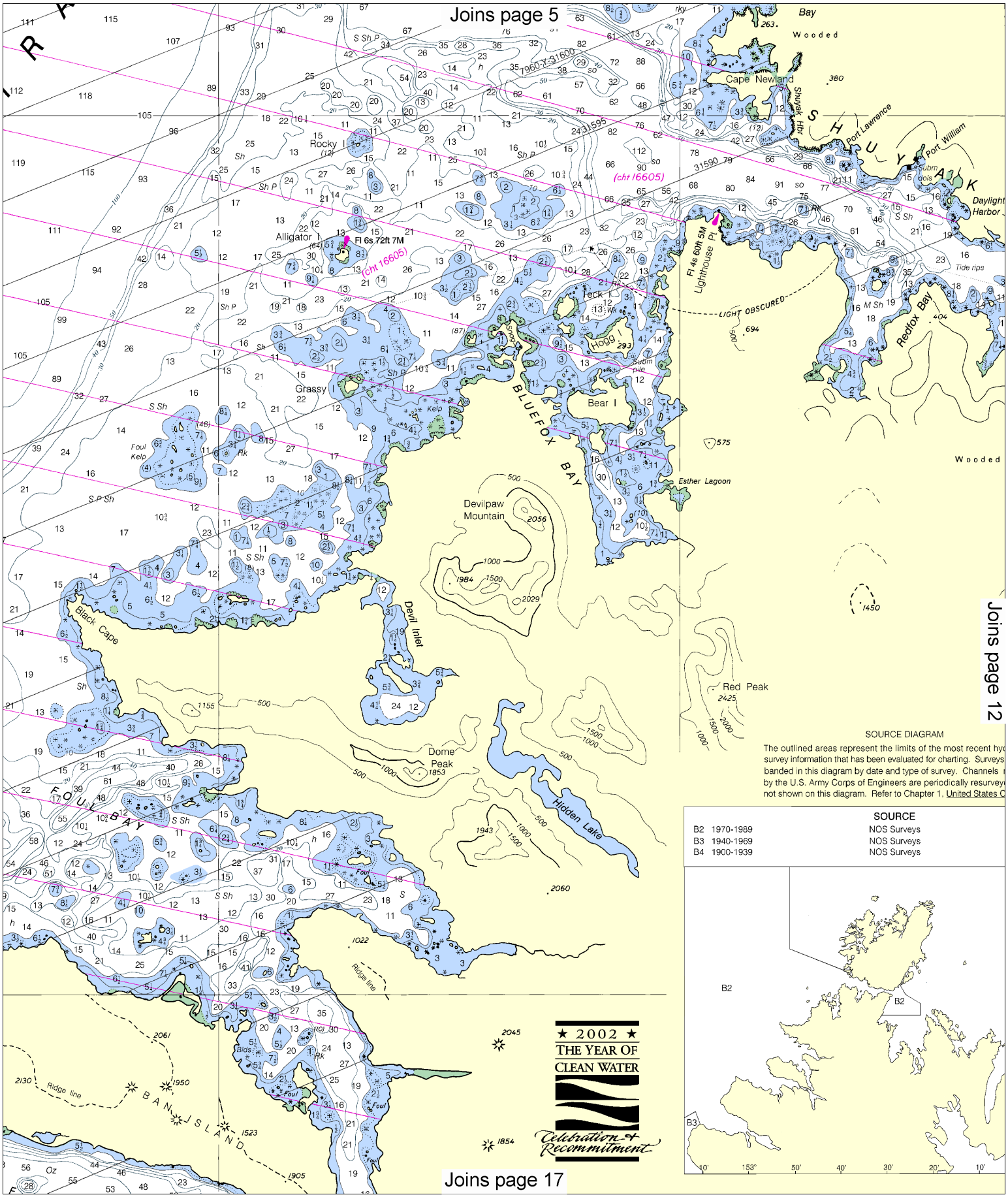
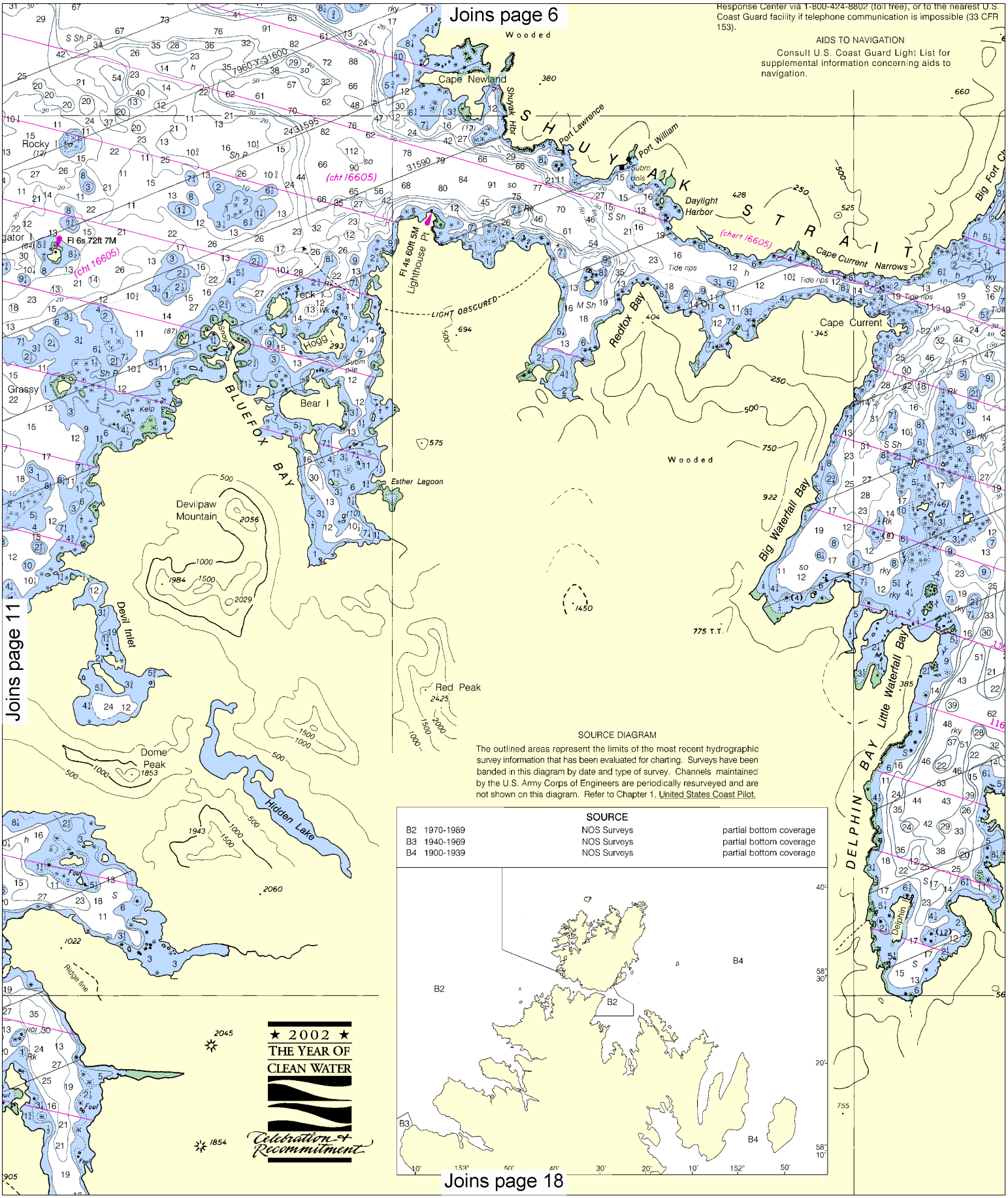
Note: Chart grid lines are aligned with true north.


Joins page 5
Cape Newland
Shuyak Hbr
Port Lawrence
Port William
Daylight Harbor
Alligator I
Fl 6s 72ft 7M
(cht 16605)
Rocky I
Fl 4s 60ft 5M
Lighthouse Pt
LIGHT OBSCURED
Teck I
Hogg I
Redfox Bay
Grassy I
Bear I
BLUEFOX BAY
Esther Lagoon
Devilpaw Mountain
Devil Inlet
Black Cape
Red Peak
Dome Peak
Hidden Lake
FOUL BAY
BANKS ISLAND
Ridge line
Joins page 12
SOURCE DIAGRAM
SOURCE
B2 1970-1989 NOS Surveys
B3 1940-1969 NOS Surveys
B4 1900-1939 NOS Surveys
★ 2002 ★
THE YEAR OF
CLEAN WATER
Celebration & Recommitment
Joins page 17



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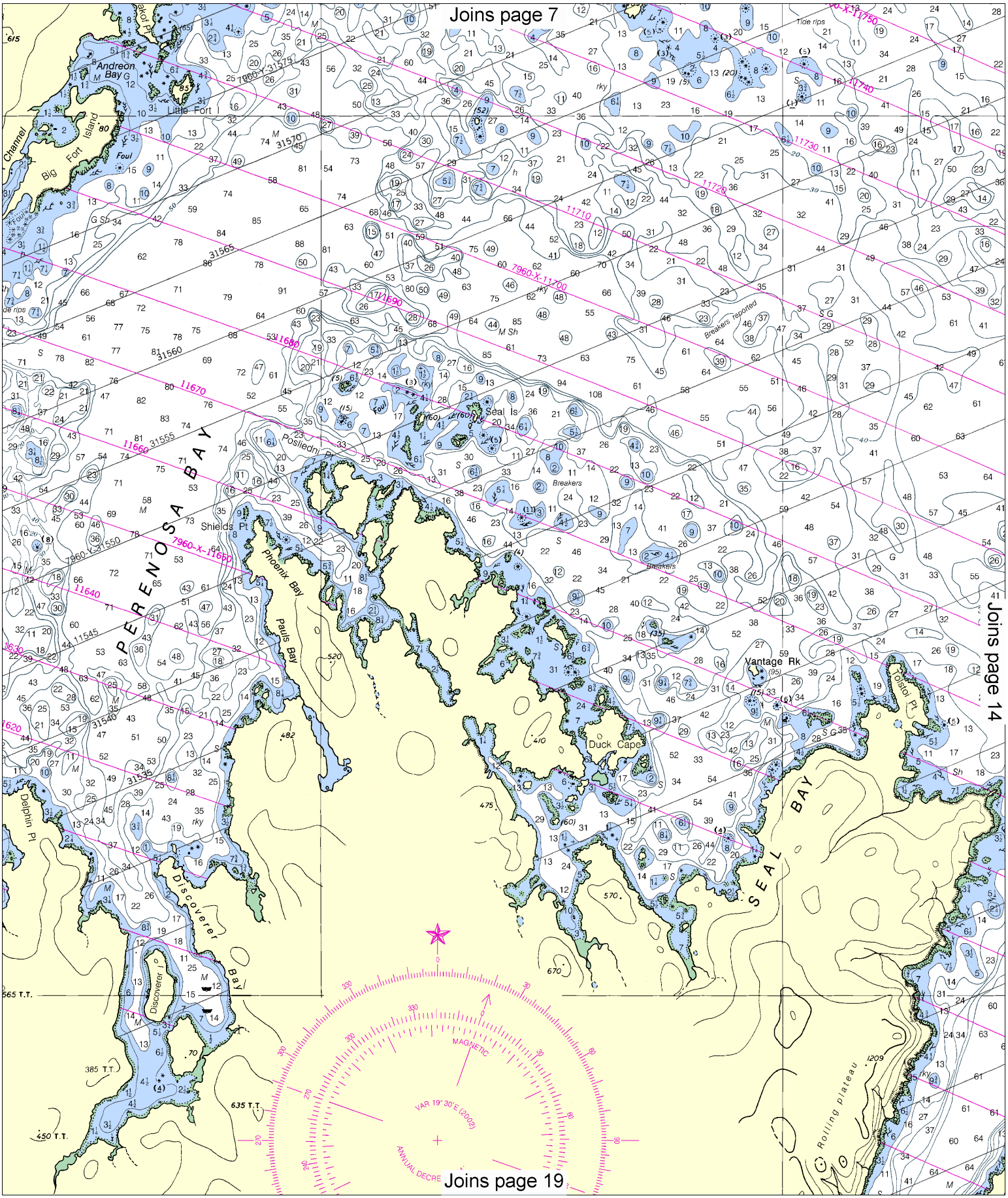
Joins page 7
Joins page 14
Joins page 19
PERENOSA BAY
SEAL BAY
Andreon Bay
Little Fort I
Fort Island
Big Channel
Foul
Shields Pt
Posliedni Pt
Seal Is
Breakers
Phoenix Bay
Pauls Bay
Discoverer Bay
Discoverer I
Delphin Pt
Duck Cape
Vantage Rk
Toisol Pt
Breakers reported
Rolling plateau
Tide rips
MAGNETIC
VAR 19° 30'E (2002)
ANNUAL DECRE
7960-X-11750
11740
11730
11720
11710
7960-X-11700
11690
11680
11670
11660
7960-X-11650
11640
11630
11620
31575
31570
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31545
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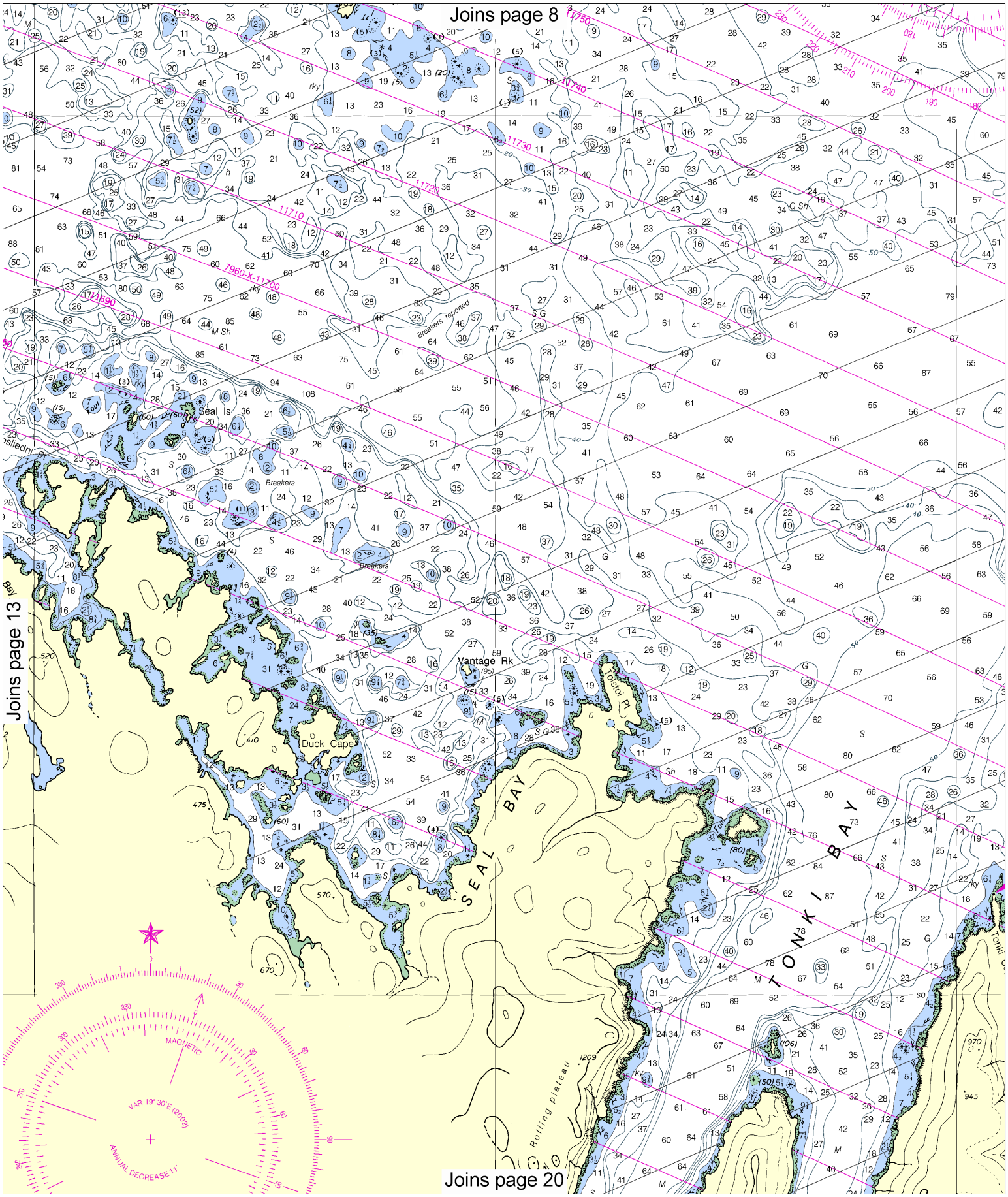
31535
565 T.T.
385 T.T.
635 T.T.
450 T.T.



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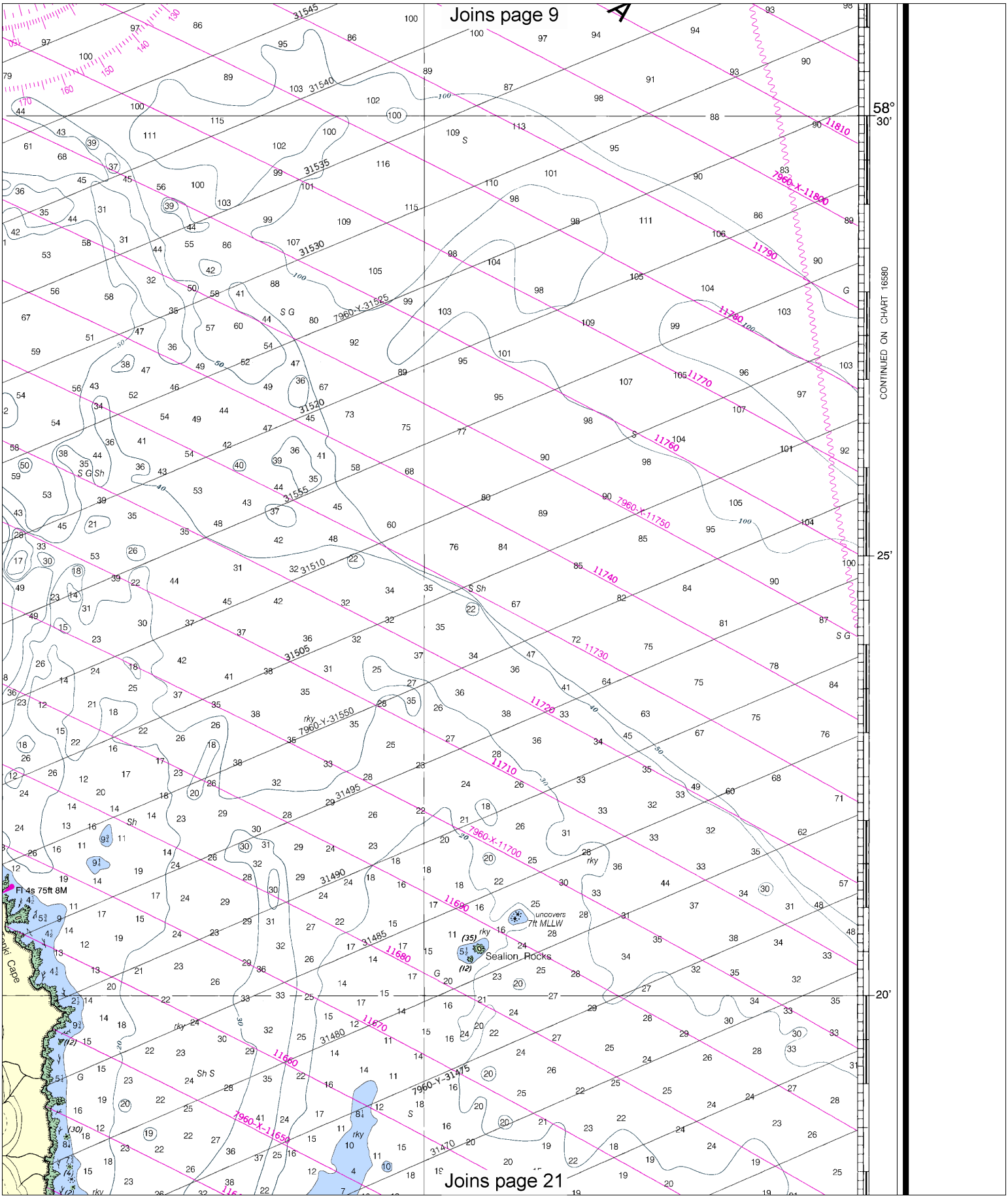
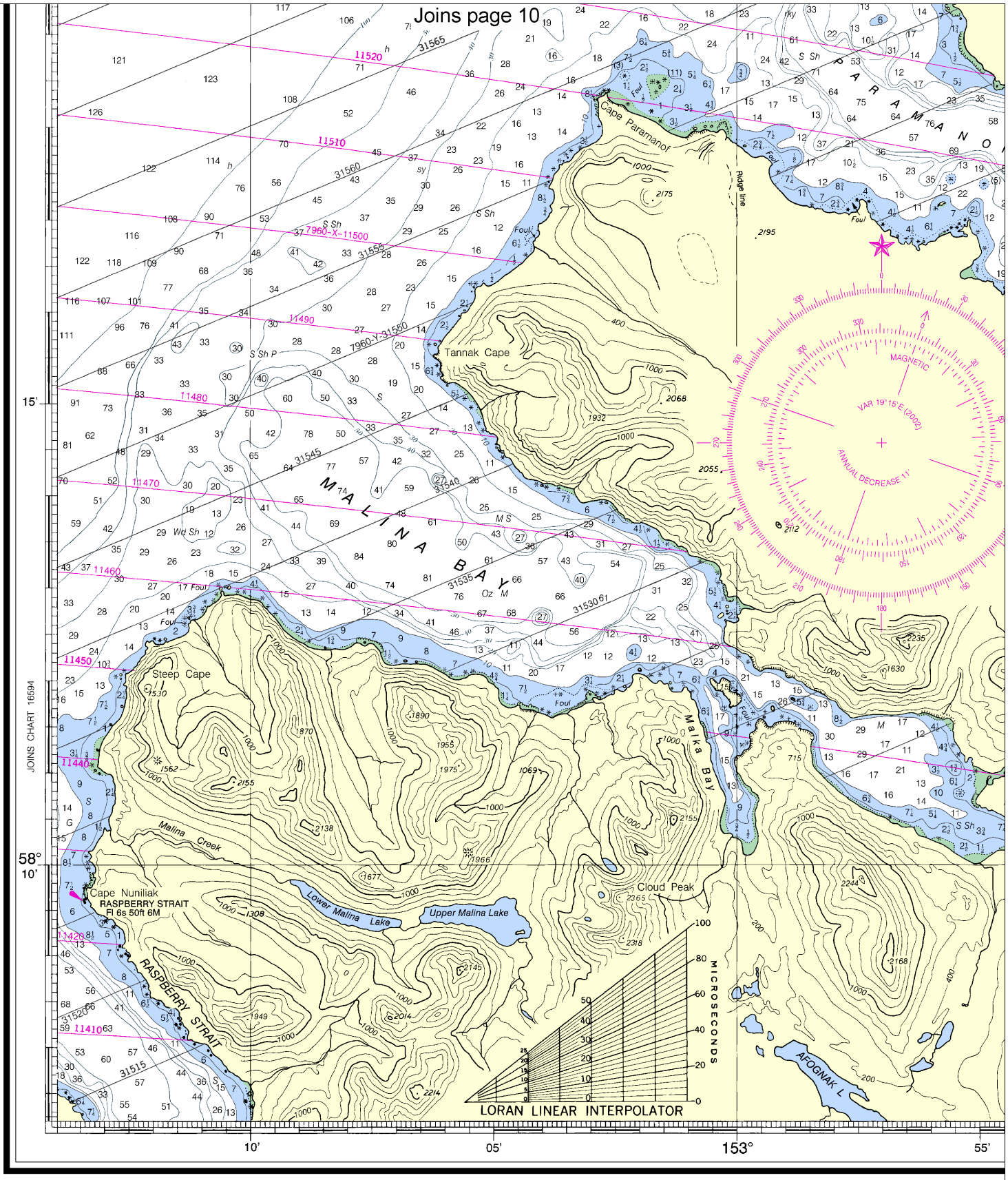

Joins page 9
58° 30'
25'
20'
CONTINUED ON CHART 16580
Fl 4s 75ft 8M
Cape
uncovers 7ft MLLW
Sealion Rocks
Joins page 21



11th Ed., Mar. 16/02 ■

16604

LORAN-C OVERPRINTED

CAUTION

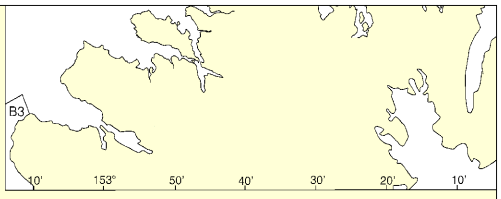
This chart has been corrected from the Notice to Mariners published weekly by the National Imagery and Mapping Agency and the Local Notice to Mariners issued periodically by each U.S. Coast Guard district to the date shown in the lower left hand corner.

SOUNDINGS IN F

16

Note: Chart grid lines are aligned with true north.

Joins page 11



AFOGNAK ISLAND

UNITE

ALASKA - S

SHUYAK AND A

AND ADJAC

Mercato
Scale 1:78,0
North America
(World Geode

SOUNDING
AT MEAN LOV

LORAN-C

GENERAL EXPLANATION

LORAN-C FREQUENCY.....100kHz
PULSE REPETITION INTERVAL
7960..... 79,6000 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M ..... Master
W ..... Secondary
X ..... Secondary
Y ..... Secondary
Z ..... Secondary

EXAMPLE: 7960-X

RATES ON THIS CHART

7960-X 7960-Y

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COLREGS, 80.1705 (see note A)
International Regulations for Preventing Collisions at Sea, 1972.
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NOAA WEATHER RADIO BROADCASTS

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Bede Mt, AK	WNG-528	162.450 MHz
Pillar Mt, AK	WNG-531	162.525 MHz
Kodiak, AK	WXJ-78	162.55 MHz

TIDAL

Place Name	(LAT/L
Malina Bay	(58°11'N/152°E
Big Bay, Shuyak I.	(58°33'N/152°3
Carry Inlet, Shuyak I.	(58°35'N/152°3
Tonki Bay	(58°19'N/152°0
Marmot Island	(58°14'N/151°E
Izhut Bay	(58°13'N/152°1

(590) Latest information available

Joins page 18

HEIGHTS

Elevation of rocks, bridges, landmarks and lights are in feet and refer to Mean High Water. Contour and summit elevation values are in feet and refer to Mean Sea Level.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 9 for important supplemental information.

CAUTION

Mariners are urged to use caution when navigating in the area of this chart due to possible changes in depths and shoreline as a result of the earthquake of Mar 27, 1964.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

ABBREVIATIONS (For complete list of Symbols a
Aids to Navigation (lights are white unless otherwise

AERO aeronautical	G green
Al alternating	IQ interrupted qu
B black	Iso isophase
Bn beacon	LT HO lighthous
C can	M nautical mile
DIA diaphone	m minutes
F fixed	MICRO TR micro
Fl flashing	Mkr marker

Bottom characteristics:

Blds boulders	Co coral	gy
bk broken	G gravel	h
Cy clay	Grs grass	M

Miscellaneous:

AUTH authorized	Obstn obstruct
ED existence doubtful	PA position ap

21 Wreck, rock, obstruction, or shoal swept
(2) Rocks that cover and uncover, with hei

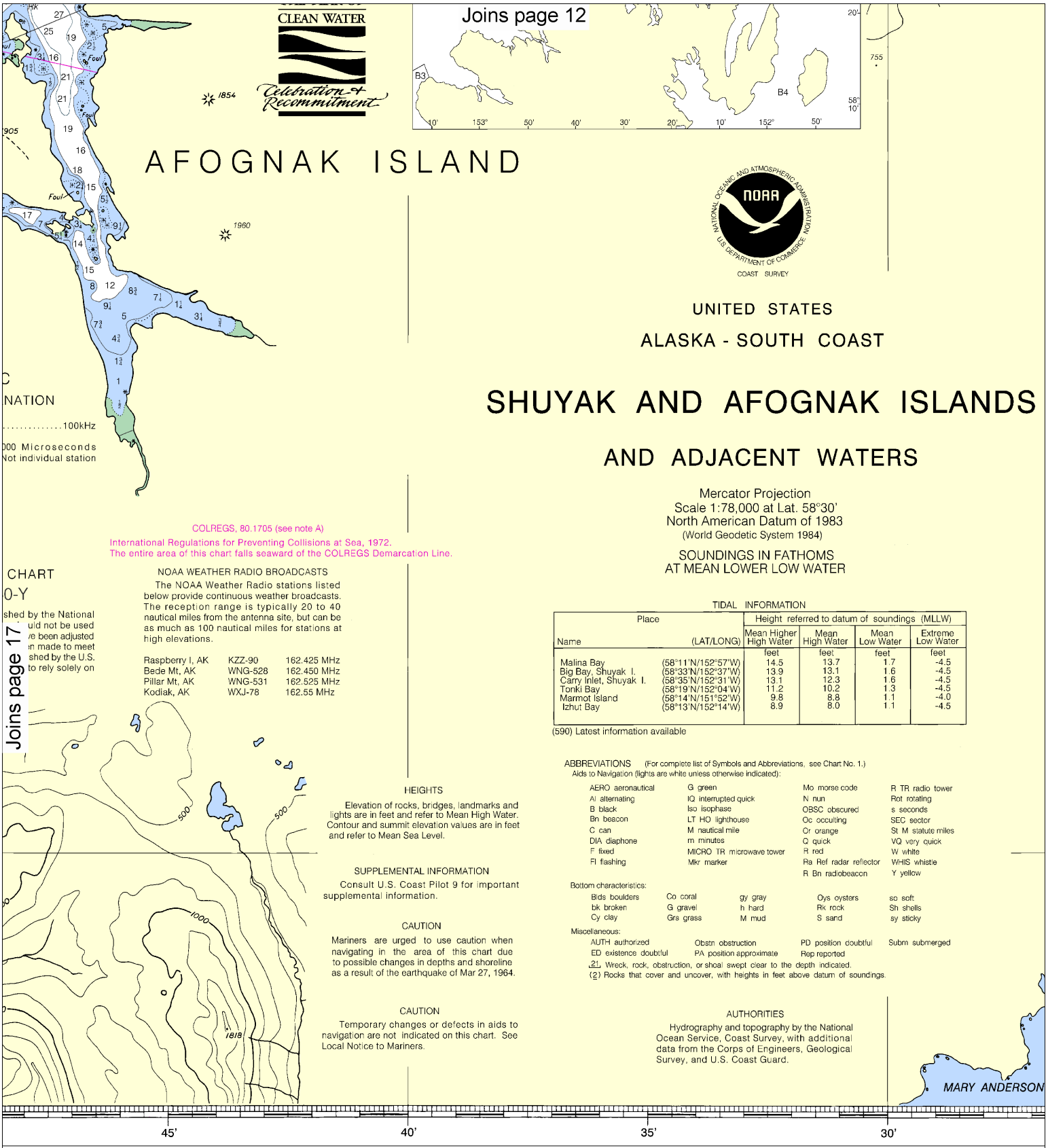
AUTH
Hydrography and t
Ocean Service, Coas
data from the Corps
Survey, and U.S. Co

Afognak Mountain
2255

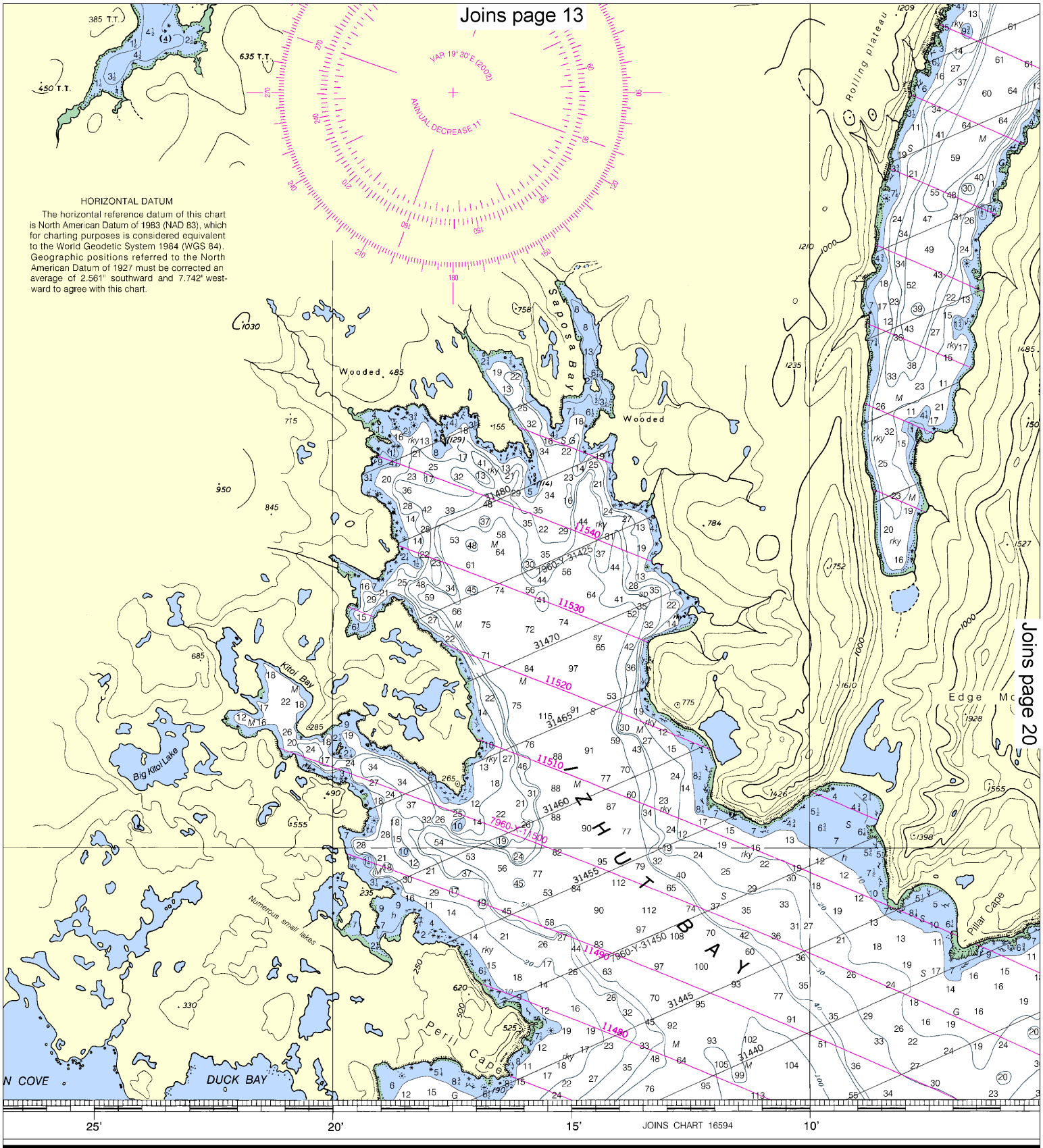
50' 45' 40' 35'

FATHOMS

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.



Note: Chart grid lines are aligned with true north.



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COMMERCE
HERIC ADMINISTRATION
SERVICE
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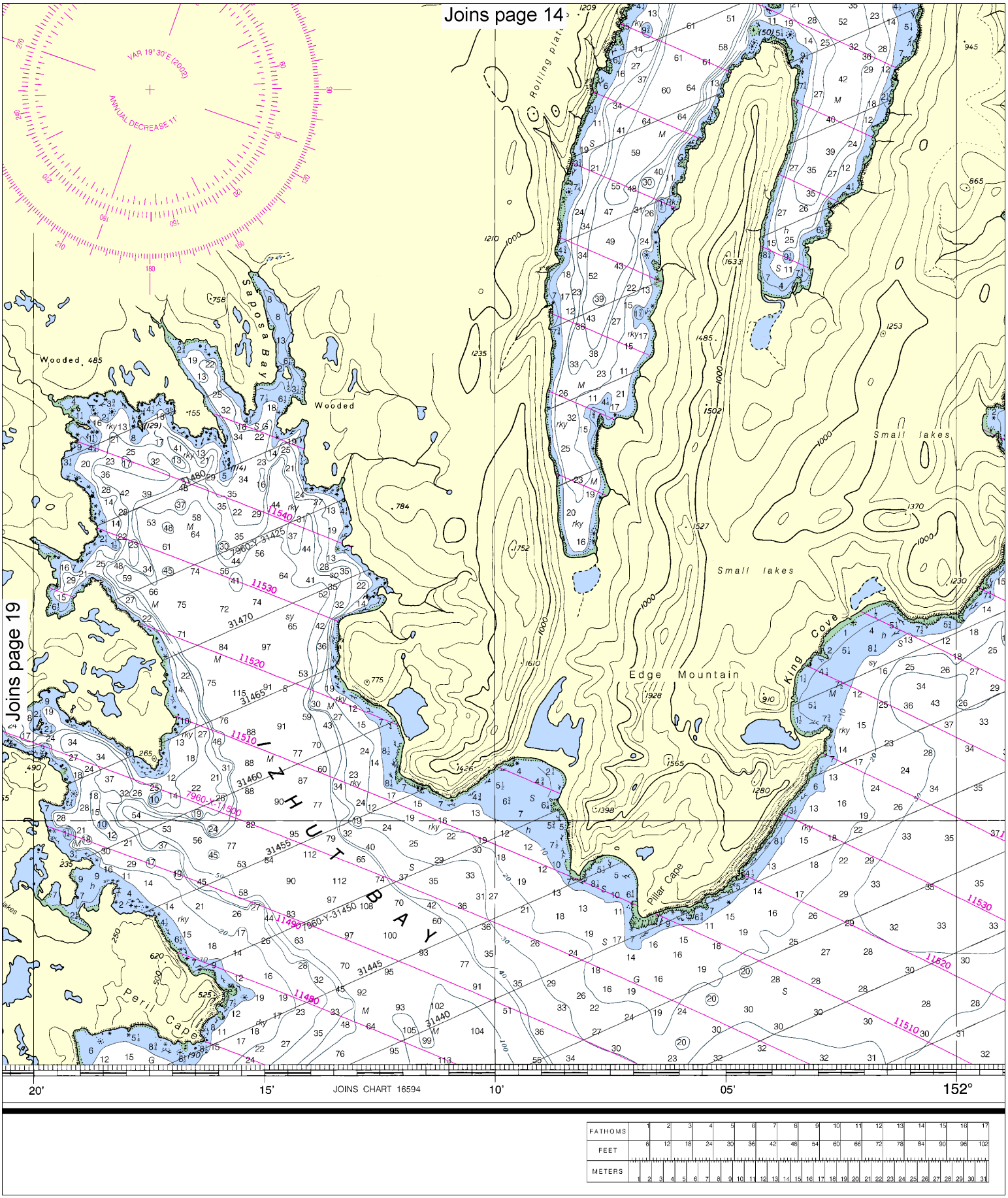
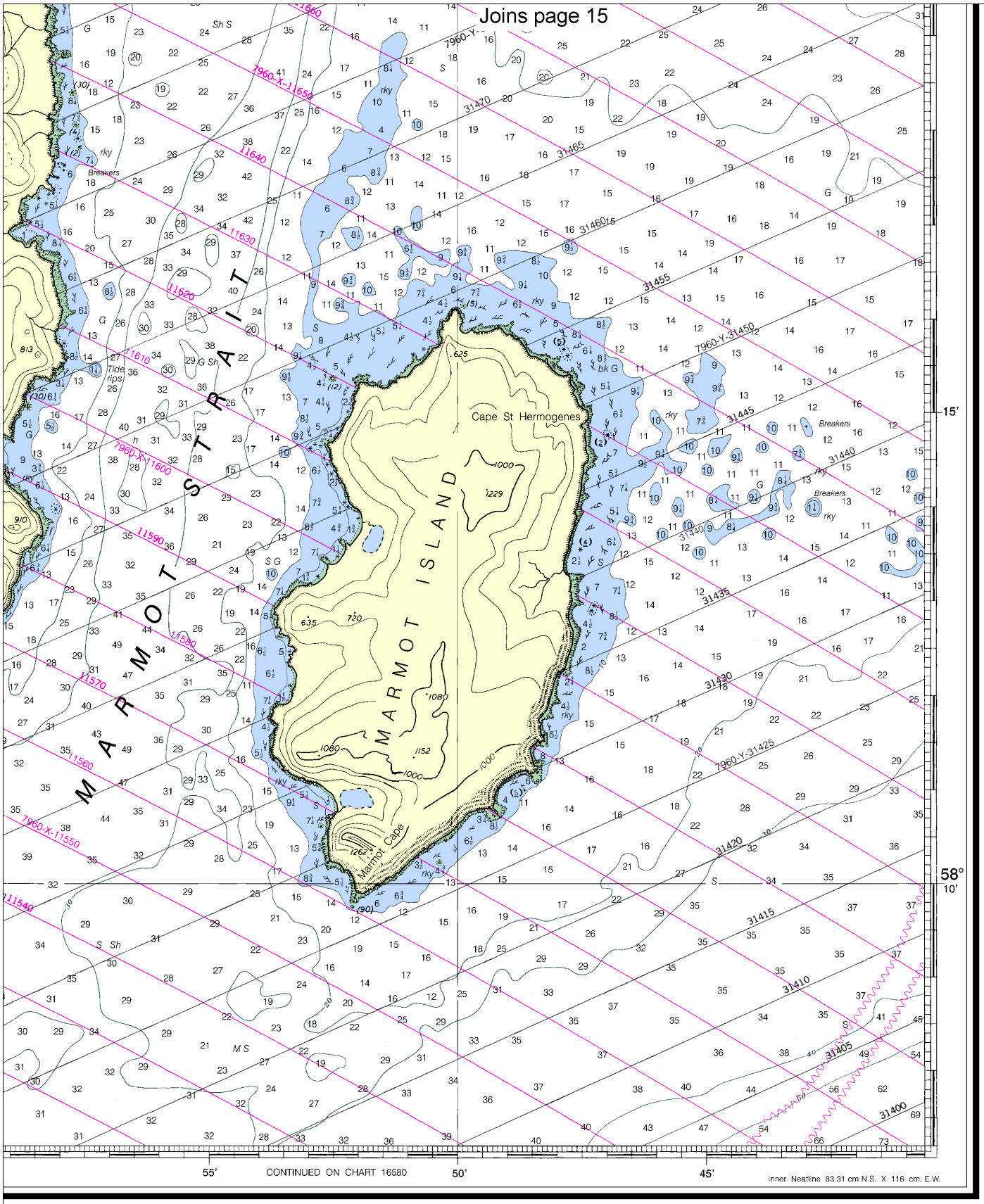


Note: Chart grid lines are aligned with true north.



Shuyak and Afognak Islands and Adjacent Waters

SOUNDINGS IN FATHOMS - SCALE 1:78,000

16604

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ED. NO. 11

NSN 7642014011287

NIMA REFERENCE NO. 16BCO16604

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

All Hazards NOAA Weather Radio NOAA's National Weather Service

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.
http://www.nws.noaa.gov/nwr/

Quick References

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Marine Forecasts	—	**http://www.nws.noaa.gov/om/marine/home.htm**
National Data Buoy Center	—	**http://www.ndbc.noaa.gov/**
NowCoast web portal for coastal conditions	—	**http://www.nowcoast.noaa.gov/**
National Weather Service	—	**http://www.weather.gov/**
National Hurrican Center	—	**http://www.nhc.noaa.gov/**
Pacific Tsunami Warning Center	—	**http://ptwc.weather.gov/**
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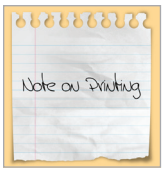

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